

IN THE CLAIMS

- 1 (Currently Amended). A method comprising:
partitioning a non-volatile storage media;
storing data in a first ~~partitioned-section~~ partition of a the non-volatile storage media;
storing, in a second ~~partitioned-section~~ partition of the non-volatile storage media, metadata corresponding to the data stored in the first ~~partitioned-section~~ partition of the non-volatile storage media; and
accessing the second ~~partitioned-section~~ partition upon a system boot.
- 2 (Original). The method of claim 1, wherein storing the metadata as packed metadata block.
- 3 (Original). The method of claim 1, wherein the partitioning is logical.
- 4 (Currently Amended). The method of claim 1, wherein storing cache data in the first ~~partitioned-section~~ partition.
- 5 (Original). The method of claim 4, further comprising:
updating the data and metadata atomically when a line of cache data in the first partitioned section is changed.
- 6 (Original). The method of claim 1, further comprising:
allocating a portion of a mass storage device as the non-volatile storage media.
- 7 (Currently Amended). A non-volatile memory comprising:
a first ~~section~~ partition to store data; and
a second ~~section-partitioned~~ partition from the first ~~section~~ partition, the second ~~section~~ partition to store metadata for the data stored in the first ~~section~~ partition and wherein the second ~~partitioned-section~~ partition is accessed upon a system boot.

8 (Original). The memory of claim 7, wherein the second section is to store the metadata as packed metadata blocks.

9 (Currently Amended). The memory of claim 7, wherein the partitioning of the first ~~section~~ partition and the second ~~section~~ partition is logical.

10 (Previously Presented). The memory of claim 7, wherein the non-volatile memory is a portion of a mass storage device.

11 (Original). The memory of claim 10, wherein the mass storage device is one of a disk drive, a Flash memory, a ferroelectric random access memory, or a polymer ferroelectric random access memory.

12 (Original). The memory of claim 7, wherein the non-volatile memory is a cache memory.

13 (Currently Amended). A system comprising:
a non-volatile storage media having a first ~~section~~ partition and a second ~~section~~ partitioned partition from the first ~~section~~ partition;
a memory control hub to cause the first ~~section~~ partition to store data and the second ~~section~~ partition to store metadata for the data stored in the first ~~section~~ partition; and
a processor coupled to the memory control hub to access said second ~~section~~ partition on system boot.

14 (Currently Amended). The system of claim 13, wherein second ~~section~~ partition is to store the metadata as packed metadata blocks.

15 (Currently Amended). The system of claim 13, wherein the partitioning of the first and second partitions ~~partition~~ is logical.

16 (Previously Presented). The system of claim 15, further comprising a mass storage device and wherein a portion of the massive storage device is the non-volatile storage media.

17 (Original). The system of claim 13, wherein the non-volatile storage media is a cache memory.

Claims 18-21 (Canceled).

22 (Currently Amended). A program loaded in a computer readable medium comprising:

a first group of computer instructions to logically partition a non-volatile storage media;

a second group of computer instructions to store data in a first ~~partitioned section~~ partition of the non-volatile storage media;

a third group of computer instructions to store metadata for the data in a second ~~partitioned section~~ partition of the non-volatile storage media; and

a fourth group of instructions to access the second partition ~~partitioned~~ during a system boot.

23 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store the metadata as packed metadata blocks.

24 (Currently Amended). The program of claim 22, wherein the second group of computer instructions include computer instructions to store cache data as the data in the first ~~partitioned section~~ partition.

25 (Currently Amended). The program of claim 24, further comprising:
computer instructions to update the data and metadata atomically when a line of cache data in the first ~~partitioned section~~ partition is changed.

26 (Currently Amended). The program of claim 24, further comprising:
computer instructions to access a line of the second ~~partitioned section~~ partition to read metadata for the cache data in the first ~~partitioned section~~ partition.

27 (Currently Amended). A program loaded in a computer readable medium comprising:

a first group of computer instructions to logically partition a non-volatile storage media;

a second group of computer instructions to store cache data in a first ~~partitioned section~~ partition of a non-volatile storage media;

a third group of computer instructions to store, in a second ~~partitioned-section~~ partition of the non-volatile storage media, metadata corresponding to the cache data stored in the first ~~partitioned-section~~ partition; and

a fourth group of instructions to access the second ~~partitioned-section~~ partition to determine the state of the cache data in a system boot.

28 (Original). The program of claim 27, wherein the third group of computer instructions includes computer instructions to store the metadata as packed metadata blocks.

29 (Currently Amended). The program of claim 27, further comprising:

computer instructions to update the cache data and metadata atomically when a line of cache data in the first ~~partitioned-section~~ partition is changed.

30 (Original). The program of claim 27, further comprising:

computer instructions to allocate a portion of a mass storage device as the non-volatile storage media.

Claims 31-44 (Canceled).